

About the study

Maribyrnong River catchment flood mitigation study

Together with the community, Melbourne Water is exploring flood mitigation options to help reduce flood risk for the lower Maribyrnong River catchment

What the study involves

The study is a comprehensive assessment of sustainable flood mitigation options for the Maribyrnong River catchment. The options aim to support a reduction in future flood risk and will prioritise the safety of communities in the catchment area.

The mitigation options will be assessed through an Evaluation Criteria and Cost-Benefit Analysis. This will be shaped through community feedback.

Community input will be crucial for the success of the study. There will be many opportunities to participate in the study through various engagement activities.

What are flood mitigation options?

Flood mitigation options are different ways to help to reduce the risk of flooding. The options may be structural or non-structural. We will also look at both traditional and innovative options. Some examples are provided in the table.

Structural flood mitigations

Traditional options	May include reservoirs, dams and retarding basins.
Innovative options	May include nature-based options, such as restoring wetlands or creating 'spongy' areas where the hard surfaces of urban areas are cleared to allow the landscape to absorb water.

Non-structural flood mitigations

Traditional options	May include zoning and development restrictions, flood warning systems, community education or emergency management plans.
Innovative options	May include flood resilient homes and improved preparedness through community response rehearsals.





Given the size and diversity of the Maribyrnong River catchment, it is unlikely that just one flood mitigation option will be identified.

The study is likely to identify some options which could be implemented by Melbourne Water and other delivery partners in the short term, medium term (a minimum of 5 years) and others which will take considerable time to implement (a minimum of 10-15 years).

What are the Evaluation Criteria?

The flood mitigation options will aim to reduce the risk of flooding; however, this is not the only criteria. Other evaluation criteria will also be used.

The Evaluation Criteria will consider several factors, including, social, economic and environmental factors, feasibility and cost, and the features you value most in the local community.

We are seeking feedback on what features matter most to you in the local community and based on this feedback, a 'weight' or 'score' will be given to each feature or group of features.

For example, we may learn that trees are important based on feedback received from community.

In this simplified example, trees would receive a higher 'score' in the Evaluation Criteria. Options that protect or generate new trees would then be prioritised over ones that didn't.

It is important to note that there will be many competing factors when assessing mitigation options and trade-offs will likely be required when making decisions. We are committed to regularly reporting how decisions have been made to the community, including why certain flood mitigation options have been included or excluded.

What is a Cost-Benefit Analysis?

A Cost-Benefit analysis (CBA) is a best-practice evaluation method which is widely used to estimate and compare the total costs and benefits of a project in economic terms.

Usually expressed as a dollar value, the result of the CBA helps to understand if a mitigation option, or combination of mitigation options, offers value for money.

Using the earlier example, community feedback on what matters most to you, such as trees, will be one of several factors that are considered when assessing whether an option offers better value for money than another option.

When will the study occur?

The study started in early 2025 and is expected to finish by mid-late 2026.

Who is delivering the study?

Melbourne Water is delivering the study alongside Jacobs, one of the world's largest providers of flood modelling and mitigation services.

Why is the study needed?

After the significant flooding of the Maribyrnong River in October 2022, and with the knowledge climate change will likely bring more frequent and severe flooding, this study forms part of the work needed to identify, develop and implement flood mitigation options that will help to reduce flood risk, while also reflecting community values as much as possible.

Speak to the team

If you have any questions please call **131 722** or email enquiry@melbournewater.com.au

Visit the Let's Talk website to learn more about the project, view current and upcoming engagement opportunities and sign up to receive project updates:

letstalk.melbournewater.com.au/maribyrnong-mitigation

